

NAHB Research Center

Path Information Technology Roadmap Moves Toward Better Home Building System

The future of information technology (IT) methods holds a lot of promise for home builders, remodelers and manufacturers. IT offers exciting opportunities for building better homes at lower costs. The home building industry could be transformed from a phone and fax industry to one that uses integrated electronic wired and wireless products. In the future, building process changes will be effectively communicated by moving to a web-based project management and collaboration system that is production focused.

An IT Roadmapping Group from various segments of the home building industry has begun an industry-wide effort to use and coordinate the many aspects of IT to create this type of system. Roadmaps, which are being developed by the Partnership for Advancing Technology in Housing (PATH), are intended to serve as guidelines for the investment of private and public resources to speed the development and deployment of technologies.

Imagine a production process for houses that flows from beginning to end and would include such functions as:

- Online building permit and inspection processes designed to improve construction cycle times.
- The creation of a satellite office in your sales person's car with phone, fax, computer with CD-ROM/DVD and wireless Internet access for downloading specifications and take-offs.

Imagine little or no waiting for plans, approvals, permits and inspections. What a big change in cycle time. Picture the situation in which your staff does not have to go to a local government office to have plans approved and permits issued, rather, that process is handled electronically. Local government officials from different departments could do their plan examinations simultaneously, saving vast amounts of time. In addition, a subcommittee of the IT Roadmapping Group will be investigating the time savings of online inspections.

Think about how much more efficient the construction process would be if the computer software design, estimating and scheduling programs could work together. A subcommittee of the IT Roadmapping Group will be addressing software uniformity to prevent the gap in the work flow process between construction professionals and local governments.

While many of these techniques are not imminent for 2001, they are doable over the next five to ten years. However, this will require industry-wide planning and commitment from companies to move high priority projects forward.

The vision of IT in the home building process is that information and assistance are available to participants when and where needed to perform their functions accurately, efficiently and on time.

The journey toward that goal starts with a roadmap. The roadmap, which is expected to be published in mid-2001, will:

- Provide a common vision among the public and private sectors of how technology, if effectively implemented, will benefit the industry.<
- Serve as an investment guide for research and development in the public and private sector.
- Direct academic as well as private research providers.
- Facilitate joint activities between the private and public sectors that will eliminate barriers to achieving the vision.

Roadmapping work began in March 2000 in Kansas City where a cross section of industry experts identified and evaluated 40 "technology options" as candidates for roadmap development. Options that involved the expanded use of IT were consolidated into a portfolio that was designated by the PATH Steering Committee as being the highest priority for roadmap development.

The high priority given IT by the committee reflects a strong belief in what the Internet, enterprise resource planning, wireless communications, location/global positioning system (GPS) technologies and other rapidly evolving tools can do to help PATH meet its goals of making homes more affordable, energy efficient and durable by 2010.

If you are interested in participating in the IT roadmapping process, please contact Ross Heitzmann at the NAHB Research Center, (800) 638-8556, ext. 6280.

The NAHB Research Center is the not-for-profit research arm of the National Association of Home Builders, and is located in Upper Marlboro, MD. In its nearly 40 years of service to the home building industry, the Research Center has provided product research and building process improvements that have been widely adopted by home builders in the United States. Through testing and certification services, the NAHB Research Center seal is recognized throughout the world as a mark of product quality and an assurance of product performance.

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